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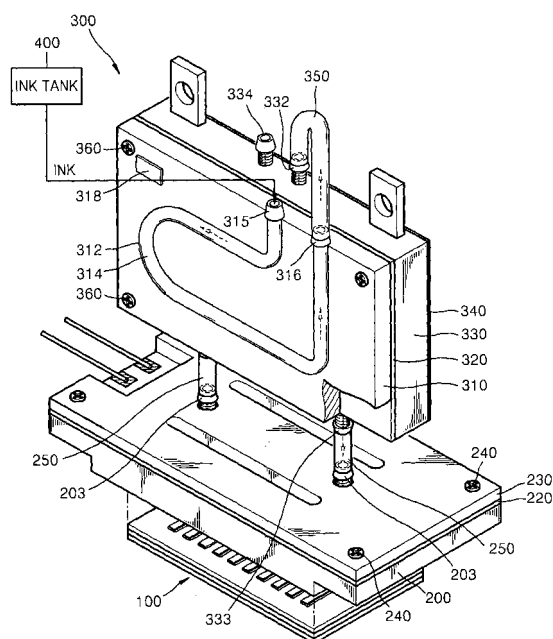
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(54) **Ink supply apparatus and inkjet printhead package having the same**

(57) Provided are an ink supply apparatus and an inkjet printhead package having the ink supply apparatus. The ink supply apparatus includes a preheating plate, an ink reservoir, a pressure adjusting film, and a flat preheater. The preheating plate includes an ink path having a first ink inlet allowing inflow of ink and a first ink outlet allowing outflow of the ink. The ink reservoir includes an ink containing space, a second ink inlet allowing inflow of the ink from the first ink outlet of the preheating plate into the ink containing space, and a second ink outlet supplying the ink to the printhead chip from the ink containing space. The pressure adjusting film is attached to a surface of the ink reservoir to cover the ink containing space. The flat preheater is disposed between the preheating plate and the ink reservoir for making thermal contact with the preheating plate and the ink reservoir. The inkjet printhead package includes the ink supply apparatus, a frame including an ink supply hole connected with the second ink outlet of the ink reservoir of the ink supply apparatus, and a printhead chip mounted on a bottom of the frame. Therefore, ink can be heated more efficiently to a sufficient temperature, so that the inkjet printhead chip can eject the ink at a high performance even when the ink has a high viscosity. Further, the ink can be supplied to the printhead chip at a uniform pres-

sure, so that the ink ejection can be performed stably.

**FIG. 1**



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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 1238809      A	11-09-2002	JP 2002264362 A	18-09-2002
		US 2002130940 A1	19-09-2002
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